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## Fascia iliaca block for primary hip arthroplasty - a reply

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We thank Drs Cumberworth, White and Stott for their interest in our study<sup>1</sup>.

We chose spinal morphine to make our results more relevant to a worldwide audience<sup>2</sup>. Preservative-free spinal morphine can provide excellent analgesia after arthroplasty surgery and is recommended by the PROSPECT collaboration<sup>3</sup>. Dose-finding studies have found that 0.1 mg provides optimal analgesia whilst minimising side-effects<sup>4</sup>. It is difficult to make comparisons between different spinal opioids without first determining the equipotent dose for the outcome under investigation. It is therefore not possible to state with any certainty whether spinal morphine or diamorphine would have been more effective when compared with fascia iliaca block in the absence of a further randomised controlled trial.

We are unaware of a randomised study comparing the different fascia iliaca block approaches and relative success of lateral cutaneous nerve of thigh block. Our technique replicated that reported by Dolan et al.<sup>5</sup>, which had not been evaluated in a clinical setting but demonstrated 90% success of lateral cutaneous nerve of thigh block. Our study did not differentiate between pain from the skin incision (lateral cutaneous nerve of the thigh) and that from the hip joint and surrounding structures, and whilst we accept high pain scores at 3–6 h could clearly be due to a failed block, other possible reasons include lack of sacral analgesia as stated. In our study, at 3- and 6-hour time points, three and four patients respectively in the fascia iliaca group had a pain score of greater than or equal to 7. One patient in the spinal morphine group had pain scores of greater to or equal to 7 at 3- and 6-hour time points. Our study was a carefully powered non-inferiority study and to re-analyse as suggested would be based on speculation only. We believe the exclusion of only a few patients would be unlikely to result in a different conclusion.

The authors' comments regarding skin incisions are correct, but we did not collect data regarding incision site nor the nature of pain postoperatively and therefore cannot undertake the suggested re-analysis. From personal communication, our surgeons performed a posterior incision in the vast majority of cases.

We accept the authors' comment about age as an exclusion criterion, but chose age limits similar to other studies<sup>6, 7</sup>. If 5% of patients in our study were over 85 as quoted above, this would have accounted for 5 patients between both groups. Whilst we agree the inclusion of this group could have provided further interesting information, it would have been unlikely to alter the primary outcome significantly. Although there is some evidence that elderly patients are more sensitive to local anaesthetics and may be more susceptible to respiratory depression<sup>4</sup>, we are unaware of any specific evidence that fascia iliaca blocks are any more (or less) successful in this age group and do not believe this is a significant weakness of our study.

We fully agree that further work in the field of anaesthesia for both elective and emergency hip surgery would be of great interest.

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